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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/628,312	07/28/00	MATSUMOTO	K 106889

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QM02/1019

EXAMINER

GRAY, M

ART UNIT

PAPER NUMBER

3746

DATE MAILED:

10/19/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/628,312

Applicant(s)
Matsumoto

Examiner
Michael K. Gray

Art Unit
3746



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 28, 2000
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other: _____

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DETAILED ACTION

Drawings

The three substitute drawing sheets received by the USPTO on October 2, 2000 are acceptable as formal drawings.

Specification

The specification should be reviewed to correct any possible minor errors.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, lines 8-9, the claimed element "the extraction terminal" has no antecedent basis.

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In line 11 of claim 5, the language "injection molded with the stator with a resin" is confusing. This confusing syntax should be rewritten in a distinct and clear manner consistent with a method claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuka (6,023,113).

Otsuka discloses a bearing box housing a bearing 2, 4 formed in the center portion of a cylindrical casing 1b. A rotor 6 is held on a shaft 5 rotatably supported on the bearing. A stator consisting of a stator core 10 and a coil 10b is held on the periphery of the bearing box. A magnet 13 (ring-shaped) is spaced from the stator. A PC board is connected to a terminal (extraction terminal) of the coil and is provided with an electronic circuit (col. 2, lines 61-62) for controlling electric current for driving the fan or blower apparatus. The terminal is electrically connected to the PC board.

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It would have been obvious for one of ordinary skill in the art to connect and manufacture the fan motor disclosed by Otsuka by a plurality of methods. The claim language used in the last four lines of claim 1 and in claims 2-4 is in essence an effort to claim a method in the guise of an apparatus claim. Accordingly, the limiting language describing the materials by which and how the apparatus is made has been given no weight.

*The 35 USC 112, second paragraph, problems noted for claims 5-8 make a focused application of art difficult. However, as the invention was understood, an application of art references were applied as indicated below.

Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otsuka (6,023,113) in view of Kiri et al. (5,350,960).

As for claims 5-8, Otsuka discloses a bearing box housing a bearing 2, 4 formed in the center portion of a cylindrical casing 1b. A rotor 6 is held on a shaft 5 rotatably supported on the bearing. A stator consisting of a stator core 10 and a coil 10b is held on the periphery of the bearing box. A magnet 13 (ring-shaped) is spaced from the stator. The impeller 6 is made of resin.

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A PC board is connected to a terminal (extraction terminal) of the coil and is provided with an electronic circuit (col. 2, lines 61-62) for controlling electric current for driving the fan or blower apparatus. The terminal is electrically connected to the PC board.

PC boards made of resin compositions are conventional in the art.

Kiri et al. demonstrate that resin may be used as an insulator for a variety of electrical motor components, e.g., insulation for coils (coil guards 16), an insulating cover for the rotor 17, and wiring board 43. Injection molding is taught for use with a resin material. (Col. 11, lines 22-33).

In that proper insulation of electrical components is desirable to enhance durability and prevent short circuiting, it would have been obvious to coat or make the components taught by Otsaka of resin to enhance durability and operating longevity of the fan/blower device. Further, in light of Kiri et al. it would have been obvious to use a resin component as a pattern for injection molding or for casting a given component.

References

The following references are deemed pertinent to applicant's disclosure:

Clark (WO 97/08805) demonstrates an electric motor having plastic components.

Matsumoto (6,278,207) demonstrates the apparatus related to the present invention.

Matsumoto (6,196,802) discloses a synthetic resin fan.

Kitajima et al. (5,460,503) discloses a mold forming a coreless armature.

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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Gray whose telephone number is (703) 308-6196.

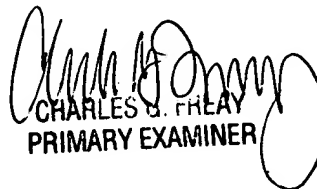
If the examiner does not answer the phone, a message will be provided as to when he will be in the Office. A message can be left by the caller on the Examiner's voice mail. Dialing zero will give the caller further options. The examiners's supervisor Timothy Thorpe can be reached at (703) 308-0102.

The examiner's fax number is (703) 308-7763. Please indicate the application's serial number, art unit and examiner's name on the cover sheet. A call to the examiner indicating a fax is being sent will expedite the processing of the faxed material.

Any inquiry of a general nature should be directed to the receptionist whose telephone number is (703) 308-0861.

/Michael K. Gray mfg

Patent Examiner, Art Unit 3746


CHARLES S. FREAY
PRIMARY EXAMINER